| | Application No. | Applicant(s) | |
|--|--|--|---------------------------|
| Notice of Allowability | | | |
| | 09/516,284 Examiner | BERNATH ET AL. Art Unit | |
| | A O Ob | 0047 | |
| | Annan Q. Shang | 2617 | |
| The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R of the Office or upon petition by the applicant. See 37 CFR 1.31 | S (OR REMAINS) CLOSED i) or other appropriate comm RIGHTS. This application is: | n this application. If not include unication will be mailed in due | ed course. THIS |
| 1. A This communication is responsive to <u>amendment after Fir</u> | nal filed 09/01/05. | | |
| 2. X The allowed claim(s) is/are 18,19,23,26-37 and renumber | ed as 1-5,8,6,7,12,13-15 and | d 9-11 respectively . | |
| Acknowledgment is made of a claim for foreign priority unany All by Some* cy None of the: Certified copies of the priority documents have Certified copies of the priority documents have Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). | e been received. e been received in Applicatio | on No | ion from the |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. | of this communication to file MENT of this application. | e a reply complying with the req | uirements |
| A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which giv | nitted. Note the attached EX res reason(s) why the oath o | AMINER'S AMENDMENT or No r declaration is deficient. | OTICE OF |
| CORRECTED DRAWINGS (as "replacement sheets") mu (a) including changes required by the Notice of Draftsper 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner Paper No./Mail Date | son's Patent Drawing Review 's Amendment / Comment o | r in the Office action of | |
| Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the state of the stat | l.84(c)) should be written on t the header according to 37 CF | he drawings in the front (not the FR 1.121(d). | back) of |
| DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT | OSIT OF BIOLOGICAL MAT FOR THE DEPOSIT OF BIO | ERIAL must be submitted. N OLOGICAL MATERIAL. | lote the |
| Attachment(s) | | • | |
| 1. Notice of References Cited (PTO-892) | | formal Patent Application (PTC |)-152) |
| 2. Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No. | ummary (PTO-413), /Mail Date | |
| 3. Information Disclosure Statements (PTO-1449 or PTO/SB/0 | | Amendment/Comment | • |
| Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8. 🛛 Examiner's | Statement of Reasons for Allo | wance |
| · | 9. Other | CHRIS KELLEY RVISORY PATENT EXAMINER | |
| | | CHNOLOGY CENTER 2800 | |

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DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Christopher J. Rourk, Reg. No. 39,348 on 09/15/05.

The application has been amended as follows: On page 2 of Specification, line 18, insert "60/183,130" after "Serial No."

On page 2 of Specification, line 21, insert "09/516,096" after "Serial No."

On page 12 of Specification, line 13, insert "60/183,130" after "Serial Number."

Allowable Subject Matter

- 2. Claims 18-19, 23 and 26-37 are allowed.
- 3. The following is an examiner's statement of reasons for allowance: With respect to claims 18, 26 and 31, the instant invention is directed to a system for receiving data, a cable modem and a method for receiving data, comprising a programmable media access controller, a programmable pattern matching engine, a CRC engine and a cable modem DMA controller. The relevant prior art of records, such as **Isono et al (6,216,171)** disclose cable modem control method giving priority to packets from the cable head end over packets from the subscriber LAN. **Sherer et al**

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(6,434,165) disclose method and system to abort data communication traffic in a communication network and further disclose a Receiver CRC checker MAC frame generator. Enns et al (6,658,010) disclose high-speed Internet access system. Quigley et al (6,650,624) discloses cable modern apparatus. However neither Isono, Sherer, Enns nor Quigley and any of the cited references teach or suggest, alone or in combination, the feature of "a CRC engine performing CRC processing of a received data frame if the programmable media access controller determines to continue receipt of the data stream and a cable modern DMA controller coupled to the programmable media access controller, the programmable pattern matching engine, and the CRC engine, the cable modern DMA controller facilitating movement of data between the programmable media access controller, the programmable pattern matching engine, and the CRC engine," as recited in combination with other features of independent claim 18.

With respect to claim 26, neither **Isono, Sherer, Enns** nor **Quigley** and any of the cited references teach or suggest, alone or in combination, the feature of "a programmable CRC engine that is programmed by the media access controller and a cable modem DMA controller coupled to the programmable media access controller, the programmable pattern matching engine, and the CRC engine, the cable modem DMA controller facilitating movement of data between the programmable media access controller, the programmable pattern matching engine, and the CRC engine," as recited in combination with other features of independent claim 26.

With respect to claim 31, neither **Isono, Sherer, Enns** nor **Quigley** and any of the cited references teach or suggest, alone or in combination, the feature of "processing the data frame with the DES/CRC engine if the predetermined portion of the data frame matches at least one of the acceptable parameters and facilitating movement of data between the programmable media access controller, the pattern matching engine and the DES/CRC engine," as recited in combination with other features of independent claim 31.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Quigley et al (2004/0259605) disclose method and apparatus for latency reduction in low power two-way communications equipment applications in hybrid fiber coax patents.

Laubach et al (6,917,614) disclose multi-channel support for virtual private networks in a packet to ATM cell cable system.

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Annan Q. Shang** whose telephone number is **571-272-7355**. The examiner can normally be reached on **700am-400pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Christopher S. Kelley** can be reached on **571-272-7331**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the **Electronic Business Center (EBC) at 866-217-9197 (toll-free).**

Annan Q. Shang.

CHRIS KELLEY
SUBTRICTORY PATENT EXAMINER
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